

Application No.: 10/563,084

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Docket No.: 64726(45710)

Reception of Optical Signal" and should be changed to reflect such change prior to issuance of the patent.

This is the title as originally filed in the priority PCT document, PCT EP04/07155 filed herein pursuant to 35 U.S.C. § 371, the cover page of which is attached hereto. Accordingly, this corrects a defect originally in the filing receipt, not the fault of Applicant, and is not new matter.

Applicants believe that no fee is due. However, the Director is hereby authorized to charge any deficiency in the fees filed, asserted to be filed or which should have been filed herewith) or with any paper hereafter filed in this application by this firm) to our Deposit Account No. 04-1105, under Order No. 64726(45710).

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Respectfully submitted,

By 

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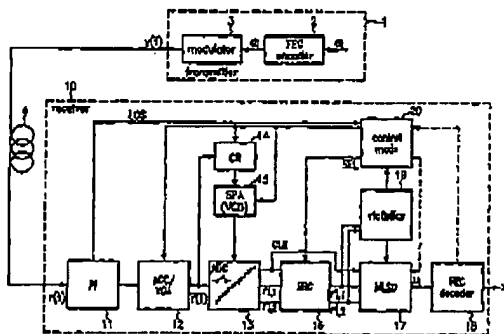
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(54) Title: CHANNEL ESTIMATION AND SEQUENCE ESTIMATION FOR THE RECEPTION OF OPTICAL SIGNAL



(57) Abstract: The application relates to channel estimation. The method comprises digitizing an analogue signal representing a sequence of symbols thereby associating one digital word with the level of said analogue signal at each sampling time. The most likely sequence of symbols is detected. To this end branch metrics are provided. According to one embodiment, a symbol period comprises at least two sampling times. Moreover the branch metrics are obtained from frequencies of digital words resulting from a digitizing and the symbols of the most likely sequence. According to another embodiment a symbol period comprises at least one sampling time. Events are counted wherein each event is defined by a channel state and a current digital word. Each channel state is defined by a pattern of symbols relative to a current symbol determined at the time of a current digital word. A model distribution is fitted to event counts and a branch metrics is obtained from the fitted model distribution. Moreover the invention relates to corresponding symbol detectors for optical receivers.

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CHANNEL ESTIMATION AND SEQUENCE ESTIMATION FOR THE RECEPTION OF OPTICAL SIGNAL

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Abstract of WO2005011220

The application relates to channel estimation. The method comprises digitizing an analogue signal representing a sequence of symbols thereby associating one digital word with the level of said analogue signal at each sampling time. The most likely sequence of symbols is detected. To this end branch metrics are provided. According to one embodiment, a symbol period comprises at least two sampling times. Moreover the branch metrics are obtained from frequencies of digital words resulting from a digitizing and the symbols of the most likely sequence. According to another embodiment a symbol period comprises at least one sampling time. Events are counted wherein each event is defined by a channel state and a current digital word. Each channel state is defined by a pattern of symbols relative to a current symbol determined at the time of a current digital word. A model distribution is fitted to event counts and a branch metrics is obtained from the fitted model distribution. Moreover the invention relates to corresponding symbol detectors for optical receivers.

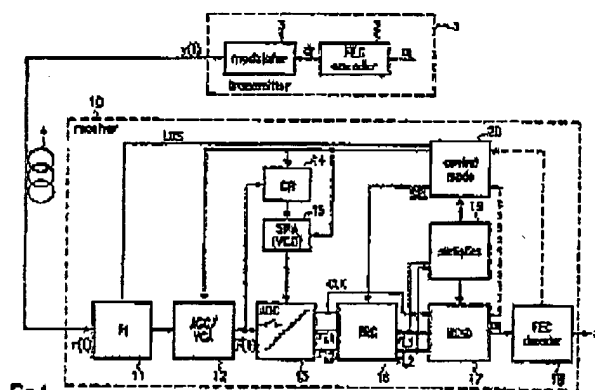


Fig.1

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